





INDEPENDENT OFFICES APPROPRIATION BILL FOR 1933

HEARING

BEFORE THE

SUBCOMMITTEE OF HOUSE COMMITTEE ON APPROPRIATIONS

CONSISTING OF

MESSRS. CLIFTON A. WOODRUM (CHAIRMAN)
JOHN J. BOYLAN, WILLIAM W. HASTINGS, WILLIAM C. WRIGHT,
EDWARD H. WASON, AND JOHN W. SUMMERS

IN CHARGE OF

INDEPENDENT OFFICES APPROPRIATION BILL FOR 1933

J.E.G.
FEB 24 1941

WEDNESDAY, FEBRUARY 10, 1932.

SMITHSONIAN INSTITUTION

STATEMENTS OF HON. ALBERT JOHNSON, MEMBER OF THE BOARD OF REGENTS; DR. C. G. ABBOT, SECRETARY; DR. ALEXANDER WETMORE, ASSISTANT SECRETARY; JOHN E. GRAF, ASSOCIATE DIRECTOR; LEONARD C. GUNNELL, ASSISTANT IN CHARGE OF INTERNATIONAL CATALOG OF SCIENTIFIC LITERATURE; AND H. W. DORSEY, CHIEF CLERK AND ADMINISTRATIVE ASSISTANT TO THE SECRETARY

Mr. WOODRUM. We will take up the items for the Smithsonian Institution. Doctor Abbot, are you going to speak for the appropriation?

Doctor ABBOT. Mr. Chairman, we have with us the senior member of the Board of Regents, Mr. Johnson, of Washington, whom I would like to have you call upon.

Mr. WOODRUM. We shall be very glad to hear Mr. Johnson.

GENERAL STATEMENT

Mr. JOHNSON. Mr. Chairman and gentlemen, that is very kind of the doctor and members of the committee. I do not know that I can add anything to what these gentlemen are going to tell you. Of course, the Regents hold their office because they want to help the Smithsonian. Heretofore I think this subcommittee and the Appropriations Committee generally have been very fair to the Smithsonian. Their needs are always a little greater than the amount of money they have to care for them. However, this is not a good year, as I have told Doctor Abbot and others—and I think the Regents generally agree—to press for new appropriations.

They know that I will not support any such request. I am not a member of either of the appropriation committees of Congress. Senator Jones, of our State, is chairman of the Senate Appropriations Committee, and I know that he feels bound to restrict appropriations where they seem to be approaching the line of excess.

Nevertheless, we are hoping that this committee, following their previous practice, will not trim the funds of this institution, which does not derive all of its support from the Federal Government and yet is very much dependent on the Federal Government for its going activities.

I thank you for the opportunity of making this statement.

Mr. WOODRUM. We are glad to have heard you, Mr. Johnson.

Doctor Abbot, have you a prepared statement you would like to present to the committee before we take up the specific items of appropriation?

Doctor ABBOT. I have not a prepared statement, sir. The different items, as they come up, I think will be discussed partly by myself and partly by my associates.

SALARIES AND EXPENSES

Mr. WOODRUM. We will take up the first item, which reads as follows:

For expenses of the general administrative office, Smithsonian Institution, including an additional assistant secretary at \$9,000 per annum during the present incumbency, compensation of necessary employees, traveling expenses, purchase of books and periodicals, supplies, and equipment, and any other necessary expenses, \$38,644.

Doctor ABBOT. This appropriation is to provide for the salaries of certain employees who, previous to the fiscal year 1929, were paid from the private funds of the Smithsonian Institution. As the services of these employees are in large part concerned with the administration of the several Government bureaus administered by the Institution, their salaries have been appropriated for by Congress, beginning with the fiscal year ending June 30, 1929.

There has been no change in the duties which they perform, and no increase is asked over the appropriation for the current year.

Mr. WOODRUM. The amount asked for 1933 is exactly the same amount as was appropriated for the current year, \$38,644.

Doctor ABBOT. There is no change intended; the estimate for 1933 is the same as the appropriation for 1932.

Mr. WOODRUM. In fact, there has not been very much change in the last few years.

Doctor ABBOT. These salaries are all necessary and I do not see how we could reduce them.

PERSONNEL OF ADMINISTRATIVE OFFICE

Mr. WOODRUM. Your estimates for the current fiscal year for positions in the departmental service show 18 positions. How many of those positions are filled at the present time?

Doctor ABBOT. I think I will ask the chief clerk, Mr. Dorsey, to give you that information.

Mr. DORSEY. All of them are filled with the exception of one messenger, which calls for a salary of \$600. That is the only vacancy that we have. I might say, sir; the Smithsonian is now carrying three additional positions to these for which it is paying from its private funds, temporary positions, in order to get by with its work.

Mr. WOODRUM. Will there be any unexpended balance in your appropriation of \$38,644 for the current fiscal year?

Mr. DORSEY. No, sir.

Doctor WETMORE. You may note, Mr. Chairman, that in the past fiscal year the unobligated balance under this item was only \$1.

Mr. WOODRUM. I noticed that.

Doctor WETMORE. We are running very close to the margin. There is no surplus there.

TRAVEL EXPENSES AND PER DIEM ALLOWANCES

Mr. WOODRUM. Your travel expenses are practically nothing—\$70.

Mr. DORSEY. Practically nothing, yes.

Mr. WOODRUM. What per diem is in force now with the Smithsonian employees?

Mr. DORSEY. \$5.

Doctor WETMORE. We are carrying \$5 as a per diem and where actual expenses are allowed, not to exceed \$6. We are following what seems to be the current custom in other governmental departments in that respect, beginning with the opening of the present fiscal year.

Mr. WRIGHT. Your crew is rather stabilized?

Doctor WETMORE. Yes, sir. There is very little turnover on the staff and no shift in the positions. The duties of the various positions are quite clearly outlined and there is no change in them and no shifting from year to year.

INTERNATIONAL EXCHANGES OF PUBLICATIONS

Mr. WOODRUM. The next item is international exchanges, as follows:

International exchanges: For the system of international exchanges between the United States and foreign countries, under the direction of the Smithsonian Institution, including necessary employees, and purchase of necessary books and periodicals, and traveling expenses, \$54,060.

This item calls for an estimate of \$54,060, the same amount as was appropriated for the current year.

Doctor ABBOT. You are aware that the Smithsonian Institution is the agency for the National Government in conducting the exchanges of scientific literature and of governmental publications between this country and the foreign countries. This service grew up under private initiative and at the expense of private funds of the Smithsonian Institution. In the seventies of the last century, there began to be a large amount of the service in the carrying of Government publications. Presently treaties were made with other foreign countries which established the international system of exchanges which, therefore, grew out of the initiative of the Smithsonian Institution.

At the present time the National Government carries almost the entire cost of the service for the United States. But, as it grew up under the auspices of the institution, we still are acting to administer the appropriation.

In the past year some savings have been made, especially in Great Britain, and also from the diminished cost of boxes which are used in shipping the publications. In discussing the matter a few moments ago with the chief clerk, Mr. Dorsey, we felt that it would be possible to return to the item as it was in 1931, making a saving of about \$1,250 in that item.

Mr. WOODRUM. Making the estimate then what?

Mr. DORSEY. \$52,810.

Doctor ABBOT. Nevertheless, there has been an increase in the number of packages handled, the need for the service is growing rather than diminishing. Yet there is some diminution in the cost.

Mr. WOODRUM. How much will your unobligated balance of this item be for the current fiscal year?

Mr. DORSEY. Last year our unobligated balance was \$364.

Mr. WOODRUM. I see that.

Mr. DORSEY. This year I would estimate that that would be increased by \$1,000 or \$1,200.

Doctor ABBOT. You see, there are still five months to come and it is hard to estimate more closely.

Mr. DORSEY. Let us say \$1,500. The change in the method of shipment to Great Britain came about recently and we did not have the figures when this estimate was submitted or we would have cut the figure when we submitted our estimate to the Bureau of the Budget. The change had just gone into effect and we did not know just how it was going to work out.

Doctor WETMORE. Mr. Chairman, if I may inform you here, in previous years instead of having any surplus in this appropriation it has been necessary for the Smithsonian ordinarily to make contributions from its own private income to keep its activity going. Up to the year before last we were putting in \$1,000 or more a year from Smithsonian private funds.

Mr. DORSEY. Certain expenses, Mr. Chairman, we have to bear still out of the Smithsonian funds.

INCOME OF SMITHSONIAN INSTITUTION FROM PRIVATE SOURCES

Mr. WOODRUM. Would there be any objection, Doctor Abbot, to putting in the record a statement of the income of the Smithsonian other than what it receives from Congress?

Doctor ABBOT. I do not see any objection at all, sir. It is already included in the annual report to Congress by the institution and we can merely transfer the figures.

Mr. WOODRUM. So many times members read these hearings but do not have an opportunity to read the annual reports and if, right at this point, when you revise your remarks, you insert such statement, we will find it of value.

Doctor ABBOT. We shall be glad to do so, Mr. Chairman.

TABLE SHOWING PRIVATE INCOME OF THE SMITHSONIAN INSTITUTION FOR THE FISCAL YEAR 1931

A. Exclusive of Freer endowment: ¹	
From invested endowments and from miscellaneous sources for the general use of the institution-----	\$74,306.66
From endowments for specific use and from miscellaneous sources for specific use-----	62,528.93
Total-----	136,835.59
B. Freer endowment: From invested securities-----	311,377.40
Grand total income from private sources, applicable (a) for general uses, (b) specific general uses, and (c) purposes of Freer gift-----	448,212.99

ETHNOLOGY RESEARCHES AMONG AMERICAN INDIANS AND NATIVES OF HAWAII

Mr. WOODRUM. The next item is American ethnology, as follows:

American ethnology: For continuing ethnological researches among the American Indians and the natives of Hawaii, the excavation and preservation

¹ Endowment given by Charles L. Freer, of Detroit, for the care, protection, and maintenance of the Freer Gallery of Art, and the encouragement of the study of the civilization of the Far East, the purchase of fine examples of Oriental, Egyptian, and Near Eastern objects of art, and, in certain contingencies, the purchase of works of American painters, sculptors, and potters.

of archæologic remains under the direction of the Smithsonian Institution, including necessary employees, the preparation of manuscripts, drawings, and illustrations, the purchase of books and periodicals, and travel expenses, \$72,640.

Doctor ABBOT. This appropriation is to provide for the regular expenses of the Bureau of American Ethnology in making investigations of the languages, customs, and history of the American Indians, including the exploration and preservation of archæological remains.

No increase over the current appropriation is asked, but the entire amount requested is needed to obtain from the few remaining aged survivors of some of the tribes the record of their languages and customs.

Mr. WOODRUM. The estimate for 1933 is in the amount of \$72,640, the same as the current year.

Doctor ABBOT. I am sorry, Mr. Chairman, that the chief of the bureau is in South America on an expedition in connection with that work, carried on by private funds and the next assistant is also on field work, so that I have asked Mr. Dorsey to speak to that, if he will. He is familiar with the situation.

Mr. DORSEY. Mr. Chairman, the appropriation estimate shows no increase over the current year. During the year 1931 there were two vacancies in the staff of the bureau which were not filled until the year 1932 came in, so that the bureau had the salaries of those vacant positions in order to provide for the necessary field work of the staff. During the current year, these two positions have been filled by two live men, Doctor Strong, of Nebraska, and Mr. Walker, who is engaged in research among the southern tribes.

This year the bureau will be greatly in need of additional funds to provide for the field work of these men.

To give you an illustration of the urgency of some of this field work, Mr. Harrington, one of our ethnologists, who is working now in California, ran across the sole survivor of the San Juan Tribe of Indians there. She was an old woman; in fact, she was on her deathbed. Doctor Harrington got hold of her and worked with her every day, sometimes two hours, sometimes three hours, or as long as she could stand it, to revise the vocabulary of that tribe. Fortunately, he got through before she finally passed away.

Doctor Swanton a few years ago saved all that is known of the language of the Ofo Indians in Louisiana. He ran across a woman there who was the last, absolutely the last survivor, and he got this information from her.

Mr. Hewitt, who is working with the Iriquois Tribe, has been trying to get some information about the league of the Iriquois, and he got that information last summer from the only survivor who had the information. The old Indians are the only ones who have the knowledge of the tribes that these men are trying to secure for posterity.

So that it is urgent to keep this work of the bureau up as strongly as we can. As I say, the amount asked for is the same as the current year's appropriation. But Mr. Stirling is going to have very great difficulty in carrying on the work by reason of the fact that these two positions have been filled and there is no increase in the amount assigned to the field work.

Mr. WRIGHT. Are your ethnologists making any effort to preserve the sign language?

Doctor ABBOT. I do not think our men are working on the sign language, are they, Mr. Dorsey?

Mr. DORSEY. No. Of course, they have come in contact with it, a great deal, Judge Wright. But I do not think they have gone into it. General Scott, who we might say is a colleague of the bureau, has done a great deal of work on that. He is an authority on the sign language and all of the ethnologists are more or less familiar with it. But I don't recall that the bureau has published anything on it since the three papers by Col. Garrick Mallery, issued about 1880. Bulletin 30, Handbook of Indians north of Mexico, also contains an article on this subject.

Doctor ABBOT. You know General Scott is going to give a demonstration of that?

Mr. WRIGHT. Yes.

Mr. SUMMERS. Is he in the Government service and if so what is his position?

Mr. DORSEY. He is a retired Army officer and has no position in the Government service. He works in collaboration with the bureau. He is in correspondence with our men very often.

TRAVEL EXPENSES

Mr. WOODRUM. Your travel expenses, I notice, are estimated for in the same amount. Does not the difference in per diem have any effect on that?

Mr. DORSEY. No, sir. These men are paid actual expenses. These are not strictly speaking travel expenses. These men go out and live in camps out in the wilds. It is not the ordinary travel of Government officials. They are paid actual expenses.

Doctor ABBOT. That is to say, the actual travel would be a very small fraction of the expense stated.

Mr. DORSEY. It is largely subsistence in the field, that is what it really is.

Doctor WETMORE. That ordinarily runs from \$1.50 to \$2 or \$3 a day, not much more than that. It is not at all comparable with the money paid for subsistence in similar travel around cities.

Mr. DORSEY. It is about half.

Doctor WETMORE. Yes; just about half.

Mr. WOODRUM. Will there be any unexpended balance in this appropriation this year?

Mr. DORSEY. No, sir.

Doctor WETMORE. I may say, Mr. Chairman, that in all of our activities where per diem or subsistence is indicated, in no case does the per diem exceed \$5 a day and in no case does the actual allowance exceed \$6. In case these men work in camp, the amount we allow is the actual expense, which is ordinarily a very reasonable sum.

Mr. SUMMERS. I was wondering if your statement in regard to the per diem for travel applied outside the United States as well as in the United States?

Doctor WETMORE. Yes, sir.

Mr. SUMMERS. That is, it has been reduced \$1 from what it formerly was?

Doctor WETMORE. Yes.

Mr. SUMMERS. That reduction is applicable outside as well as in the United States?

Doctor WETMORE. Yes, sir.

Mr. WOODRUM. So you can not point to any place where we can make a substantial cut in your general appropriation?

Mr. DORSEY. I think it would be disastrous, Mr. Chairman.

Mr. WOODRUM. All of these 19 positions shown for this year are filled, Mr. Dorsey?

Mr. DORSEY. There is one vacant position, Mr. Chairman, assistant photographer, that we have not filled. That is \$1,250, grade 1.

Mr. WOODRUM. Is it your purpose to fill that position or do you consider it a key position that would come under the rule of Congress and the President that you are only to fill important positions now?

Mr. DORSEY. I do not know whether Mr. Stirling intends to fill that position. I rather doubt that he does.

INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE

Mr. WOODRUM. The next item is for the International Catalogue of Scientific Literature, which reads as follows:

International Catalogue of Scientific Literature: For the cooperation of the United States in the work of the International Catalogue of Scientific Literature, including the preparation of a classified index catalogue of American scientific publications for incorporation in the International Catalogue, clerk hire, purchase of books and periodicals, traveling expenses, and other necessary incidental expenses, \$8,150.

The amount asked for is \$8,150, the same amount as your current year's appropriation.

STATUS OF INTERNATIONAL CATALOGUE

Doctor ABBOT. Last year at the hearing we promised the committee that if nothing favorable turned up to the revival in full force of the International Catalogue we would suggest the cutting off of the appropriation.

I was present in London in September and made inquiries as to the possibility of continuing that work and very discouraging reports were given me, as no money was available. So that I came back from Europe with the idea that we should wind up the affairs of the International Catalogue in June, 1932.

However, since my return, Mr. Gunnell, who is here, who is in charge of the International Catalogue, has made some very interesting inquiries, associated with a plan of his. These inquiries are now in course of making. I will ask Mr. Gunnell if he will, to tell the committee what the status of the International Catalogue is.

Mr. GUNNELL. Back in 1900 the organization was founded and consisted of 34 bureaus representing the governments all over the world. The material for this International Catalogue was produced by those bureaus. That was the principal value of the work. Approximately 300,000 references were furnished by these bureaus

each year to the central bureau in London. There was no idea of making any profit out of this scheme, but each government undertook to bear the whole expense of its regional bureau.

As Doctor Abbot has just said, the London central bureau, failing in having the means to reestablish the work, the Secretary at my suggestion has addressed each of the governments through the scientific societies representing their government, asking if they would continue the work if sufficient funds for the actual publication were found from some other source.

We have a rather encouraging idea from Dr. Ernest Richardson, who is the consultant in science and bibliography in the Library of Congress—he was president of the American Library Association and is the foremost bibliographer in the world; he is enthusiastic about the value of the catalogue, and he is of the opinion that if we can get these bureaus to resume functioning, that the actual money for the printing can be obtained from some other source. As I stated before, the whole value of the enterprise was that it was international, through the governments themselves, and if the work is allowed to lapse now, it probably never will be brought up again.

Doctor Richardson estimated, if it had to be brought up by some other means, it would cost about \$3,000,000, and as it is now, we can, if we get favorable answers from this correspondence, start it for about \$75,000. But that will not be requested from the Government. The Government of the United States will not have any part of that. Their only function is to run a regional bureau here representing the United States with the other cooperating bureaus throughout the world.

Mr. WOODRUM. What is the function of the regional bureau here? What do these three employees do?

Mr. GUNNELL. Collect, index, and classify all the scientific literature in the United States and furnish the references which are sent over to the central bureau in London. There they are assembled, published—or were before the enterprise stopped—published in 17 annual volumes that are sold at the cost of printing.

Mr. WOODRUM. When did the work over there stop?

Mr. GUNNELL. In 1922. The actual printing stopped. At that time there was a convention held in Brussels, and the representatives of these various countries agreed to keep their bureaus functioning sufficiently to reestablish the work when the financial conditions justified or made it possible.

Mr. WOODRUM. Have they done that?

Mr. GUNNELL. To a certain extent. A number of the larger ones have; France has; Italy has to a certain extent; Japan did. Germany was out of it on account of the war and I can not state to what extent anything has been done there. But these letters that the Secretary has sent out to find out just what the present status is will give us that information.

Mr. WOODRUM. What is the situation with reference to your work in America? Is it being published or printed?

Mr. GUNNELL. It is simply being collected, the data is being collected.

Mr. WOODRUM. Is it put on card index form or office records or in what form is it kept?

Mr. GUNNELL. It will be in card index form which will be sent to a central bureau.

Mr. WOODRUM. To be published?

Mr. GUNNELL. To be published, yes.

Mr. SUMMERS. But they have not been published for several years.

Mr. GUNNELL. They have not been published since 1922.

Mr. SUMMERS. The material is collected from the different countries and is ready for publication?

Mr. GUNNELL. The agreement in Brussels was that the regional bureaus would continue their work so that in the event of the publication being resumed, it could be started without any reorganization.

Mr. SUMMERS. You send your material there to be published?

Mr. GUNNELL. No. We are accumulating it here. The central bureau is not functioning now on account of the lack of means. We are collecting it but we are not forwarding it. It will be used when the publication is resumed in England.

Doctor ABBOT. We have the material in the Smithsonian.

Mr. GUNNELL. We are simply keeping it. We are keeping the wheels going. There are only two people employed, myself and a clerk, and it would be utterly impossible to do all the work of the regional bureau. We simply have kept the thing going to keep up our part of the agreement which was made in Brussels.

Doctor ABBOT. Mr. Chairman, the Institution would request that the appropriation be made as before. As you will notice in previous years we have turned in a considerable portion of the appropriation annually to the Treasury at the end of the year. I have sent out letters, which were written about a month ago, to the principal countries inquiring if they can continue their work in collecting the data and join a revival of the international enterprise if the means be found to publish. If their replies should not be favorable we would turn the whole appropriation back after the first of July.

Mr. WOODRUM. What would be the effect of not continuing this work for a year until we find out what they are going to do?

Doctor ABBOTT. I think that would rather defeat the object. We try to keep this bureau functioning until the result is known. But if by the 1st of July, 1932—that is the present year—we find by the replies that the project is dead, then we shall not use the appropriation, if made.

Mr. WOODRUM. How much of that appropriation will you use during the current year?

Mr. DORSEY. \$2,500 was turned back last year and it would be practically that this year.

Mr. WOODRUM. What is your estimate of how much that would be this year?

Mr. DORSEY. I would say between \$2,500 and \$3,000 this year.

Mr. WOODRUM. So you actually are using about \$5,000 this current year?

Mr. DORSEY. Yes, sir.

Mr. WOODRUM. Would that amount run you during the next fiscal year?

Mr. DORSEY. That would run us during the next fiscal year provided the work were not resumed. If the work were resumed it

would require the whole appropriation, because there would be additional employees necessary.

Mr. WOODRUM. If we appropriated \$5,000 for this work, you could go on in the next fiscal year as you are going on now.

Mr. DORSEY. Yes, sir. But the Secretary's proposition was to discontinue it unless the work is resumed.

Mr. WOODRUM. Of course you will discontinue it entirely if the work is not carried on.

Mr. DORSEY. That is true.

Mr. WOODRUM. But if the work is carried on you can keep going as you are now until you get ready to put on full speed, with \$5,000?

Mr. GUNNELL. We would have to have another clerk to do that. We can do as we are doing now, yes; but we could not take part in the general organization, the way we did before.

Mr. WOODRUM. What I do not understand is, if the work has practically been at a standstill since 1922 and you have been each year turning back a substantial portion of your appropriation, why it would not be perfectly satisfactory to let you go on as you are right now, in *statu quo* and then if things pick up full speed we will provide for you. In other words, this committee does not like to provide for things that may happen. We have to see the need for an appropriation before we can sanction it.

Doctor ABBOT. I think we could arrange to go on on that basis, Mr. Chairman.

Mr. WOODRUM. We shall be very glad to make that arrangement with the approval of the Institution.

VALUE OF WORK

Doctor ABBOT. I would like to put in the record the statement of Dr. Ernest Cushing Richardson, one of the great international authorities on bibliography and a consultant in bibliography in the Library of Congress, as to his impression of the value of this work. He stated in a paper on the International Catalogue of Scientific Literature, published in *Science*:

The research endowments are bombarded with bibliographical projects of varying method and degree of merit. They aid or support a good many projects. They are deeply concerned as trust organizations to put their money where it will do the most good. Other things being equal, they prefer to put it where one dollar will do the work of four. * * * It is here they can give the most bibliographical service with the least money. The proposition touches the libraries in a very similar way. If and when the matter is revived it will depend for financing, if not on the endowments, then on library subscriptions. If this machine is scrapped, when a new one is started either a \$3,000,000 endowment must be had from promotor of research or a quadruple price charged to libraries.

Doctor WETMORE. In any reduction of the amount that has been appropriated in previous years, it might not seem desirable to go below or to cut more than \$2,500 to allow a little margin.

Mr. WOODRUM. \$2,500?

Doctor WETMORE. Yes; although Mr. Dorsey estimated we might make a slight further saving this year, but that is problematical.

Mr. WOODRUM. All right, sir.

ASTROPHYSICAL OBSERVATORY

The next item is as follows:

Astrophysical Observatory: For maintenance of the Astrophysical Observatory, under the direction of the Smithsonian Institution, including assistants, purchase of books, periodicals, and apparatus, making necessary observations in high altitudes, repairs and alterations of buildings, preparation of manuscripts, drawings, and illustrations, traveling expenses, and miscellaneous expenses, \$37,620.

Doctor ABBOT. The Astrophysical Observatory is engaged in the study of solar radiation, on which all life on the earth depends. Its investigations indicate that the amount of solar radiation received by the earth varies, and that there is a definite relation between this and the weather. No other investigation of this subject, in comparable manner, is being done by any other institution in the world, and it promises results not only of high scientific interest, but of great economic importance in the forecasting of weather in advance.

No change is anticipated in the work of the observatory in the coming year, and there is no increase asked in the appropriation.

During the past year we have prepared for publication volume 5 of the annals of Astrophysical Observatory. It is now in page proof at the Government Printing Office and will probably be issued in a month or so, covering the work of the Astrophysical Observatory since 1920. It is full of value for scientific men all over the world. I found when I was in Europe the very greatest interest in it from the head of the British meteorological service and German meteorological service and others with whom I talked. In the work we have been able to discover that the variation of the sun which we are observing is not a haphazard matter, but is composed of regular periodicities which combined make up the apparent irregular variation that occurs. We have also been comparing these periodicities with periodicities which we find in the weather departures, the departures of the weather from its normal condition, in Washington, in Williston, N. Dak., and in Yuma. I am making a study also of the weather in Alabama in connection with the periodicities, I have a very great hope that the result of this study of the periodicities of the sun will lead to a means of forecasting the principal trends of weather over a considerable period of time, not only through one season, but years in advance. The results which have been obtained so far, although they are not definitive, lead to that hope.

I discussed the matter with the head of the British meteorological service, Doctor Simpson, and I found him very pessimistic. He said:

The weather is so variable it does not know what it is going to do itself. How can anybody predict it?

But I pointed out to him for the first time, as the result of these investigations, we had determined the variation of the sun by observations so accurate that three stations in different parts of the world agreed to within one-tenth of 1 per cent; so we are able to determine what are the real variations of the solar radiation, which warms the earth, over the last 10 years with a high degree of accuracy. We have found that the variations are not haphazard but comprise certain regular periodicities, and we have found that these

periodicities appear to be associated with periodicities in the weather of the world. We have also found the amount of lag which occurs in the response of weather to solar changes. For a long period you have a long lag, for a shorter period a short lag, and for a very short period you have still a shorter lag. So if there is a great change in the radiation of the sun, as occurred in 1922, you do not find at a period immediately following a corresponding change in the weather of the world. It is stretched across several years on account of the differences in the lag of the different periods involved.

All of these new results have been added within this last year, now that we have had the opportunity to discuss the observations in whole over a period of 10 years. Now, for the first time, we have the opportunity of making a really interesting contribution to meteorology, and I am very hopeful it will be something which will be very highly regarded. In regard to the amount of the appropriation—

Mr. WRIGHT. Have you discovered the cause of the present mild weather as exists?

Doctor ABBOT. Take such a thing as the drought we had a year or more ago and this mild eastern winter which is equally remarkable. These were things which, I suppose, may not happen once in a half century or a century. Our solar observations have extended now only for about 10 or 12 years during the whole year around. Hence they are not enough in duration to treat of as remarkable a situation as the drought or to give the reasons for so remarkable a winter as we have had this winter. It is something which requires a much longer period of observation to predict from a solar standpoint. There are other weather changes which are of a shorter interval and in which our period of observation has been sufficient to make useful forecasts when the matter is thoroughly studied and understood.

Mr. WOODRUM. How many employees in this work?

Mr. DORSEY. Eleven; 10.3 on the current year.

Mr. WOODRUM. That is your full quota. What will be your unobligated balance for this current year on this appropriation?

Mr. DORSEY. We turned back \$236 last year. We have made a saving this year.

Doctor ABBOT. We have made a saving by reduction of one in the force.

Mr. DORSEY. We have made a saving this year of \$1,395.

Doctor ABBOT. Which will go back.

Mr. DORSEY. That will go back to the Treasury.

Mr. WOODRUM. Can that not come off next year?

Doctor ABBOT. Owing to the urgency of the President's request, we cut off one of the computers after finishing with the preparation of the volume. We do not expect to fill that position next year, so that will make a difference of \$1,960 next year.

Mr. WOODRUM. Have you any outside financial assistance?

CONTRIBUTIONS

Doctor ABBOT. The Smithsonian Institute itself is carrying a considerable portion out of its private funds. I am the director and I

spend considerable of my time on this work. I am paid, however, from the private income of the Institution. We are also spending from the Hodgkins fund, which is a gift of Thomas George Hodgkins about 35 years ago, the sum of about \$4,000 a year. So you may say the Institution by its private fund is supporting this to the extent of eight or nine thousand dollars a year.

Mr. WOODRUM. This particular work?

Doctor ABBOT. This particular work. In addition, we have had during the last 10 years from a friend of the Institution, Mr. John A. Roebling, funds for the purchase of apparatus, for the transportation of observers, and for other purposes, sums which amount to \$300,000 altogether, and which have gone into this work, in addition to what the Government itself has put in.

Mr. SUMMERS. This good angel up in New York is contributing, too?

Doctor ABBOT. That is the gentleman I am speaking of—in New Jersey. Mr. Roebling is his name. He has taken a very great interest in this matter.

Mr. SUMMERS. Is he contributing now?

OBSERVATION STATIONS

Doctor ABBOT. No, not now. The National Geographic Society also became interested in this work and appropriated \$55,000 to enable me to go to the Eastern Hemisphere to try to find another first-rate observing station. They equipped the station which we located in southwest Africa and carried it on for several years and then Mr. Roebling carried it on for another year. Now we have abandoned that station. We are now occupying a station in Chile and a station in southern California and we have the central office here in Washington where we make reductions of observations, prepare the publications, make new instruments, and generally manage the work.

Mr. SUMMERS. Did you not refer to a station up in North Dakota a minute ago?

Doctor ABBOT. We are making a study of the weather at Williston, which is a station in North Dakota. We have no observation going on there, but we are taking the Weather Bureau reports of the temperatures and other meteorological data from the Williston station and studying that information in connection with the variation of the sun.

Mr. SUMMERS. Did you find a proper location for a station in the Eastern Hemisphere?

Doctor ABBOT. We located a station in southwest Africa in the midst of the Hottentot Reservation, on a mountain 5,500 feet high, which is situated in the middle of a desert. We occupied that station for several years, but it did not prove as satisfactory as we had hoped. There are high winds down there which, we found, carried the dust of the desert up over the mountain and made it very difficult to get sufficient accuracy in these observations. Mr. Roebling was so much interested, however, that he made an appropriation a little over a year ago to allow me to send an observer, one of our best-trained observers, to try to find a place in the Old World for a station as good as the location in South America which we are

occupying at this time. Mr. Moore went to one of the islands in the Cape Verde Islands and there occupied a mountain about 10,000 feet high, but found that the winds from the Sahara Desert carried a blanket of dust over that peak so that, on the average, 9 days out of 10 it is unsatisfactory. Then he went down to southwest Africa and went to the top of four or five mountains of higher level than Mount Brukkaras, which we have been occupying, and there be found some improvement on one or two of them, but nothing equal to what we have in South America. He is now approaching the Red Sea on the East Coast of Africa and will, as soon as he can make arrangements, go to Mount St. Catherine, about 10 miles south of Mount Sinai, which seems now to be the only region which is likely to offer an equally satisfactory place to our observatory in South America.

He will make observations there long enough to decide whether that mountain will be equal to our hopes. We have no funds for locating an observatory there, but if, as I have suggested, this work should really prove to be of immense meteorological improvement, then we hope means will be found to equip an observatory in case we find an excellent location for it.

Mr. WOODRUM. Any other questions? We will take up the next item.

MAINTENANCE AND OPERATION OF NATIONAL MUSEUM

The next item is in connection with the National Museum, and is as follows:

For cases, furniture, fixtures, and appliances required for the exhibition and safe-keeping of collections; heating, lighting, electrical, telegraphic, and telephonic service, repairs and alterations of buildings, shops, and sheds, including approaches and all necessary material; personal services, and traveling and other necessary incidental expenses. \$188,370.

Doctor ABBOT. This appropriation provides for cases, furniture, fixtures, and appliances, including pasteboard boxes, trays, glass jars, and vials, and other similar things needed in the care and preservation of the national collections which are now estimated at over 13,000,000 specimens; for heating, lighting, electrical, telegraphic, and telephonic services; all repairs and alterations to roofs, walls, ceilings, floors, and windows of all Museum buildings, comprising the natural history building, the south shed and such portions of the Smithsonian building as are used by the Museum.

DISTRIBUTION OF ESTIMATE

The increase submitted is allocated as follows:

Personal services:

1. Two senior mechanics, at \$1,860	\$3,720
2. One fireman	1,320

Miscellaneous expenditures:

3. Supplies and materials	5,000
4. Heat, light, etc	3,000
5. Dust removal equipment	3,000
6. Replacement of worn-out machinery	2,000
7. Water supply for fire-fighting	6,000
8. Replacing old fire hose	1,750
9. Making changes and repairs to electric wiring	8,000

Total increase ----- \$33,790

PERSONAL SERVICES

The foregoing increases are explained as follows:

1. \$8,720 for two additional senior mechanics, a painter, and a cabinetmaker: Owing to the large number of accessions, the public exhibits in the Museum are constantly changed and renovated as new specimens are received. Such changes require rebuilding, repairing, and painting in order to keep the walls and cases in proper condition and in an attractive appearance. In addition, it is necessary to make changes in other cases, many of which are antiquated, in order to modernize them so that material may be properly exhibited. With the present force, this work is often greatly delayed, with the result that exhibition halls in the Museum are closed to the public over longer periods than should be necessary. The present force also is unable to keep abreast of current demands for necessary storage cases to house and protect incoming new collections. Our requirements for work of the kind indicated are more than our present force can handle.

2. \$1,320 for the salary of one fireman: The personnel operating the heating plant has been inadequate for some time and has recently been seriously affected by the extension of Saturday afternoon holidays over the entire year. Owing to the necessity for continuous operation of the plant, there is no way in which a time saving for taking care of this situation may be effected and the addition of another fireman is required in order to insure the proper heating and lighting of the building in the Museum group during the winter months.

SUPPLIES AND MATERIALS

3. \$5,000 for supplies and materials: An increase of \$5,000 is recommended for miscellaneous supplies, including lumber and other materials for exhibition and storage cases, and office furniture, and for the purchase of boxes, trays, jars, vials, and similar containers for safeguarding specimens. These supplies are required to provide facilities for exhibiting and storing material which is constantly being received by the Museum. For some time the funds available for this purpose have been entirely inadequate, and we are getting steadily farther behind. The facilities indicated are imperative for the safeguarding of highly valuable collections.

4. \$3,000 additional for the purchase of electric current: The Museum manufactures the greater part of its electric current, but our plant, now working to capacity, can not supply all of our needs. The funds available for electric current have been inadequate for several years which has resulted in curtailing lighting in the exhibition buildings on dark days, a direct loss to the public, since they are not able to obtain full benefit from the exhibits. A careful estimate of lighting requirements has been made with a result that during the fiscal year 1933 there will be required approximately \$3,000 over the sum now available for this purpose.

EQUIPMENT, REPAIRS, AND REPLACEMENTS

5. \$3,000 for dust removal equipment for the carpenter shop: The installation of dust removal apparatus in the carpenter shop is urgently needed to safeguard the health of the workers and

to reduce fire hazard. A great portion of the cabinet work of the Museum is done in the carpenter shop and a considerable quantity of fine dust resulting from the working of hardwoods is not only present in the shop but finds its way into the paint shop in the adjoining rooms. The fire hazard would be reduced and the efficiency of this unit would be materially increased by the addition of this equipment which is considered a necessary part of every modern woodworking shop.

6. \$2,000 for the replacement of worn-out machinery: A shortage of funds has made it impossible to make all the replacements of worn-out machinery parts necessary to insure the working of the heating and lighting plant at proper efficiency. During the winter season the plant is barely sufficient to care for the needs of the Museum group of buildings, and any breakdown would make necessary either the closing of certain units of this group or a considerable added expense for the furnishing of light, a large proportion of which is now produced by the Museum plant during the heating season.

7. \$6,000 for increasing the water supply for fire fighting: The amount recommended is necessary to insure an adequate supply of water for fire protection in the Natural History Building. At the present time the water supply is obtained through one main which is now over 20 years old. Any injury to this connection would result not only in making it impossible to obtain water for fighting fire but would put out of commission the heating plant for the entire Museum group. In order to insure an adequate water supply for this building to meet all purposes, it will be necessary to make an additional connection with the department water mains and to change the distribution system within the Natural History Building, in order to insure adequate pressure and volume of water throughout this building as required. This change is recommended by the Federal fire council.

8. \$1,750 for replacing old fire hose: This increase is recommended for replacing old fire hose in the Natural History Building. While care has been given to keep this equipment in first-class condition, the hose is now over 20 years old and should be replaced that there may be assurance that it is sufficiently strong to withstand water pressure under fire conditions.

9. \$8,000 for making changes and repairs to the wiring in some of the buildings of the Museum group: A considerable amount of rewiring is necessary to reduce the fire hazards in the Arts and Industries Building, in the Smithsonian Building and the Langley workshop. Much of the electrical wiring in these buildings was done many years ago and is antiquated and constitutes an ever-present fire hazard. The amount recommended will serve to reduce the worst fire hazards by placing the electric wires, now covered only by wooden molding and other makeshifts, in fireproof conduits of modern design. This change is recommended by the Federal fire council.

Mr. WOODRUM. Have you anything in addition to the prepared statement?

Doctor WETMORE. I wish to make some other explanation, in addition to our prepared statement, if I may.

Mr. WOODRUM. All right.

Doctor WETMORE. The appropriation for the National Museum is carried under two headings, maintenance and operation, which includes the upkeep of four physical plant—heat, light, and so forth—and preservation of collections, which provides for the exhibition and preservation of the great collections in the National Museum.

In making up the estimate for the present fiscal year for the budget, it was necessary to give very serious consideration to the needs of the organization as a whole. We had in mind the injunction that there were to be no increases requested in any appropriations except in cases of actual and immediate emergency. We found our situation with regard to the National Museum such that it seemed imperative to include certain increases, which were explained to the Bureau of the Budget and which have been allowed by that bureau and are included in the items presented here-with. Only those additional things that seemed to us of immediate urgency have been stated.

A part of the proposed increases are additional moneys needed for upkeep. I shall explain these in detail presently. A part concern additional personnel.

The National Museum during period for which I have had connection with it has been entirely undermanned. Our staff is not sufficient for the requirements of our work. Mr. Graf, the associate director, and I, have given careful consideration to the needs of our organization in order to develop it to that point at which it might function properly. It is our estimate that at least 100 additional persons are needed in the various parts of the service. We have asked in this estimate consideration for a few key positions only, that it would seem to us should be supplied at the present time. With your permission I will take those up a little later in detail.

Mr. WOODRUM. Yes.

ADDITIONS TO COLLECTIONS

Doctor WETMORE. Before I go on, perhaps you would be interested in the type of things that comprise the collections that the Nation possesses in the National Museum.

The past year, despite the apparent financial depression in business circles, has been one of the most prosperous for additions to our collections that we have had. Our new accessions for this period total upwards of 1,000,000 specimens, including objects from the tiniest of insects to airplanes, motors, and things of similar size.

A part of our material comes to us from expeditions that go out in cooperation with the Smithsonian Institution, the field expenses of which are financed by the Smithsonian Institution or by friends of the Smithsonian.

ESKIMO ACCESSIONS

The things I show you now are some specimens of ivory implements that have come from St. Lawrence Island in Bering Sea. There are considerable deposits on this island known as kitchen middens, marking old village sites of the Eskimos. These date back hundreds and hundreds of years and are built of discarded refuse from the houses of these ancient peoples. We are trying to find

some means of dating them, but so far have been able to say only that they go back 2,000 years or more. These peoples had no metal. They possessed some stone implements but relied principally on bone and ivory, from which they fashioned various tools and instruments. This object that I hold in my hand is an ice creeper. It is fastened on the bottom of the skin shoes worn by the Eskimo and gives them a firm footing in working over the ice or heavy-crusted snow. This is a large fishhook made of ivory. These are daggers or knives used either in work or in fighting. One is very smoothly polished. This one is somewhat rougher.

Here is a skinning knife or a fleshing knife made apparently from the rib of a whale. These are very old. You will notice that they are dark in color, indicating that the original bone or ivory has been replaced partly by silicon and so has become fossilized. Sometimes this ivory is fossilized before it has been fashioned into implements as the tusks of walruses or mammoths are found exposed in cliffs or banks where they have become fossilized before they were utilized in making implements. These specimens have been in the ground, it is assumed, for a long, long time, and are found by digging in the deposits in which they are situated.

At the present time we have a young man, Mr. James A. Ford, wintering at Point Barrow at the extreme northern tip of the Territory of Alaska. He went up there last summer to carry on excavation work of the type described but found that the season was so late and he was so delayed in getting there by ice conditions, that he wirelessly asked permission to remain there through the winter so that he could be on the ground for an early start in the spring. He will do his work next summer and will return south next fall. During the winter he will be occupied in studies of the living Eskimo. In addition to materials that come from expeditions we have many things that come to us as gifts. Some of you gentlemen may have known the late Mr. Victor Evans, of Washington, D. C. Mr. Evans was interested in Indians and accumulated a tremendous collection of valuable objects concerning the American Indians, which on his death, by his wishes, came to the National Museum. I have brought only two specimens from the many hundreds received in the Evans collection. These are somewhat gruesome but nevertheless interesting. They are two shrunken human heads from the Jivaro Indians, the headhunters of Ecuador.

PURCHASE OF SPECIMENS

We have in the Smithsonian Institution certain special funds for the purchase of specimens in different lines. One division that is blessed with such endowment is the division of minerals, where there is money available to add to the Roebling and Confield collections such desirable specimens as may be offered for sale. I have brought to-day two or three interesting things among recent accessions of this kind to show you. Here is a vertebra or section of the backbone of a fossil reptile from Australia, that has been preserved in beds where it has been subjected to an infiltration of a mineral substance that makes opal. The bone through this instead of being changed to ordinary silicon, as is true in customary fossiliza-

tion, became opal. This is the first specimen of the kind we have ever had offered to us and I have been much interested to secure it.

Here are some cut opals acquired some months ago through purchase by one of our men traveling in Mexico. You will notice the beautiful colors in them. Here is carved malachite, a green mineral, the color being due to the presence of copper. Malachite is found principally in Russia. This particular piece was cut and carved in China, and is one we have purchased within the last few days. I may explain that the present financial depression is operating in our favor in such purchases. That piece two years ago would have cost from \$150 to \$300. We obtained it just the other day from a dealer for \$50. I imagine that he let us have it for about what it cost him.

Mr. WOODRUM. Are these Mexican opals relatively expensive? Are they valuable as gems?

Doctor WETMORE. They are not particularly expensive. The collection there cost \$300.

Mr. WOODRUM. Are they on the market?

Doctor WETMORE. You can buy them on the market, but if bought here the price is ordinarily more. The sum mentioned is a very reasonable figure and one that we obtained only by the fact that we had a man traveling in the region where such opals are obtained.

Mr. WOODRUM. Do they hold their luster?

Doctor WETMORE. Yes, sir.

Mr. SUMMERS. What material is this?

Doctor WETMORE. It is the mineral, Malachite. I may say in connection with our mineral collection, that at the present time, of the 2,400 or more known varieties of minerals, we possess examples of all but 20 or 25 of the important ones. We are adding continually to these collections and are securing some very wonderful things, a condition that is only possible through the private funds at our disposal.

FOSSIL SPECIMENS

As another example of specimens that come to us from actual collection in the field, I have here the skull of a fossil horse from Pliocene beds in Idaho. About four years ago a geologist in the Geological Survey told us of an exposure near the Snake River in south-central Idaho, in which there were a good many bones in evidence. We sent a man out there to investigate and he found in the face of a hill, elevated about five or six hundred feet above Snake River at the point mentioned, a great deposit of bones of horses that existed perhaps 2,000,000 years ago. We have been working that deposit since and have acquired around 75 or 80 complete skulls and many hundreds of other bones of horses from this bed, the deposit being one of the most remarkable that has been known. From our wonderful series of this material we are using the duplicates in exchange to obtain horse material of different kinds from other areas. Perhaps you gentlemen are familiar with the evolutionary history of the horse. The horse began in early times as a 3-toed animal. As ages passed the two lateral toes advanced up the leg, leaving the single hoof of the modern horse with which we are all familiar. The first horses were tiny creatures the size of dogs,

but as they progressed they became larger and larger until the present type was developed.

Mr. SUMMERS. What part of the earth originally were the horses from?

Doctor WETMORE. In the northern hemisphere we find fossil horses in America; also to some extent in the Old World, in Europe, and in Asia.

Mr. SUMMERS. How long has the horse, as we know it to-day, been in North America?

Doctor WETMORE. The modern horse was an importation since the days of the discovery by Columbus. There were horses here during the Ice Age, but apparently all had died out before the white men came. The Indians did not know horses prior to that time,

Mr. SUMMERS. And the wild horses of the West were the offspring of horses that were imported to American since its discovery?

Doctor WETMORE. Yes, sir. The Indians, we are told, were greatly astonished to see the first mounted Spaniards. It is related that their impression was that the horse and the man were one animal and they were a great deal surprised when the two came apart.

Mr. WOODRUM. We will have to get along.

Doctor WETMORE. This particular skull that I show was of a yearling. The first molars are just coming through. The next year it would have developed another set, and so on.

PERSONNEL NEEDS

Mr. WOODRUM. We are considerably concerned when people come here asking us for increases. You regard these positions as absolutely necessary, do you?

Doctor WETMORE. I do, sir.

Mr. WOODRUM. For the preservation of your specimens and the conduct of your organization?

Doctor WETMORE. I do. I regard them as essential to us or I would suggest that they be stricken out of the record. If they were not essential we should not have included them here. With regard to the two additional mechanics which we are asking under the appropriation for maintenance and operation we have an endless amount of cabinet work and painting to do in connection with the maintenance of our buildings and in arrangements for the proper exhibition and storage of our tremendously valuable collections. At the present time our shop force is not able to handle the volume of work that is required of them by a very great deal. They are getting steadily behind.

The additional fireman that is included here is to give us some assistance in a situation that has arisen in connection with the Saturday half-holiday granted for the entire year last year. While in clerical work and in most of the work of the institution the half day's labor concerned can be absorbed during the rest of the week; in those positions in which the man's duties consist largely in being present all of the time, in which we have to keep men employed for the entire 24 hours, it is necessary to make some provision for additional help to meet the half holiday leave.

In other words, we keep firemen engaged in the winter season for the entire 24 hours in firing our boilers. When we excuse a man

for a half day at the week end as is required by law, someone else necessarily has to do his work. We can not let the fires go down. I may explain that our firemen for about eight months of the year are engaged in firing. In the summer time they are occupied with the necessary renovations of the boilers and other similar work that may be required of them.

Mr. WOODRUM. Your 1932 appropriation provided for 50 positions?

Doctor WETMORE. Yes, sir.

Mr. WOODRUM. How many positions you have gotten now filled in this work?

Doctor WETMORE. They are all filled.

Mr. WOODRUM. All filled?

Doctor WETMORE. Yes, sir. In fact, we are employing temporary help. We have had at least two temporary painters on for seven months of this year to perform necessary work that could not be handled by the regular force. We only let them go recently because of the stringency of funds. We are having also to employ additional laborers from time to time to help out in various necessary projects.

EQUIPMENT

Mr. WOODRUM. There is an increase of \$5,000 in your equipment.

Doctor WETMORE. Yes, sir.

Mr. WOODRUM. What is that item for?

Doctor WETMORE. Do you refer to this item—supplies and materials?

Mr. WOODRUM. It is in the breakdown here as equipment.

Doctor WETMORE. The \$5,000 indicated consists of two items. In our cabinet shop we have a number of woodworking machines. At the present time these are operated in an open room. For protection from fire and as a safeguard to the health of the employees engaged, there should be provided a dust-removal apparatus in connection with these machines. Ordinarily, such apparatus carrying off sawdust and other wood remains is located in a subbasement below the shop. Because we have no subbasement we have not been in situation to consider dust-removal equipment until recently when we have found a blower type of sawdust-removing apparatus that will permit installation under our present scheme. Our men do a great deal of work in East Indian mahogany in connection with making cases for the exhibition halls. In such operations the sawdust is very fine, and the men engaged in the work become so completely red that they look as if they were engaged in a slaughterhouse. It can not be conducive to health for men to stand all day and breathe an atmosphere charged with dust of that kind.

There is a further practical side to the installation of the suggested dust-removal apparatus. Our paint shop and our other woodworking shops are adjacent to this machine room, and the dust filters out and gives us considerable trouble in our finishing work, particularly in the paint shop. We find that we can install suitable blowers and the other necessary apparatus to handle this sawdust and refuse, remove the fire hazard, and properly safeguard the health of our employees engaged in this work for \$3,000.

The \$2,000 additional is to cover certain items of replacement in the handling of our boilers and other equipment. The chief engineer gives me an estimate for next year of repairs to stokers—they are automatic stokers—of \$450; repairs to boilers and furnaces, \$400; to engines, \$200; to pumps, compressors, and motors, \$600; to instruments, \$50; and replacement of tools and similar incidental expenses, \$300; a total of \$2,000.

SUPPLIES AND MATERIALS

There is a further item of increase, in the second line, of supplies and materials. That is to cover wood, lumber, metals, and various things which we use in making our storage cabinets, and also covers the purchase of pasteboard boxes, glass vials, and similar containers necessary to store collections for safe-keeping. Our present funds are far behind our needs in these matters and it is essential that we receive this increase.

Mr. WOODRUM. When were these estimates made up?

Doctor WETMORE. Last summer.

Mr. WOODRUM. Has there not been a substantial decrease in the cost of things of that kind that you could take advantage of?

Doctor WETMORE. Nothing that would make an appreciable difference here. Frankly, we are far behind in the purchase of supplies of this kind and need more than this estimate could possibly supply. These are the things that are essential and necessary to a proper safeguarding of the collection.

The largest increase under this heading of "Maintenance and operation" is that of fire preventing and fire fighting equipment. The various items concerned amount to \$15,750.

FIRE FIGHTING EQUIPMENT

Some time back there was appointed a Federal fire council that made a special study of the situation relative to fire hazards in the buildings under the Smithsonian Institution. Their recommendation involved repairs and changes in our existing equipment in all amounting to approximately \$152,000. We have selected from the suggested items certain ones that seemed to be imperative and have included them here. One concerns an additional water main that will give further water service in the natural history building. The natural history building is the building where our central heating and lighting plant is located and contains highly valuable collections. At the present time we have only one water main supplying that building. If anything should happen to that main we would find ourselves in emergency in a terrible situation. There are times as it is when we do not derive enough water from the existing main and we do not consider that we are properly safeguarded with regard to water supply in case of fire or other emergency. That is a part of the increase, amounting to \$6,000.

Another new item is the replacement of fire hose, which will amount to \$1,750. The fire hose we have now is about 20 years old. I would hesitate to put much water pressure on it. The other item amounting to \$8,000 is for rewiring in some of the older buildings

where electrical wires are carried in old-style wooden conduits. These should be replaced as rapidly as can be with the modern type of metal installation. The present installation is a continual fire hazard. Our existing appropriation is not sufficient to allow us to absorb these unusual expenditures.

VALUE OF SPECIMENS

Mr. WOODRUM. Did you give the total value of the specimens of the exhibits that you have in the National Museum?

Doctor WETMORE. We place their value in a conservative estimate at upwards of \$120,000,000. In making that statement I desire to explain that if you were to give me \$500,000,000 I would not be able to duplicate the collections. The National collection contains many hundreds of unique specimens that have no equal or duplicate anywhere in the world, which if destroyed could not be replaced within any sum of money that might be available. As examples, I need cite only the original Star-Spangled Banner and our Washington relics to explain my meaning.

Mr. WOODRUM. Any questions?

PURCHASES OF ELECTRICITY

Doctor WETMORE. We have indicated an increase for the additional purchase of electricity in the amount of \$3,000. Last year we spent \$5,930 for that purpose. We manufacture the greater part of our electricity in our plant which, though operated to its highest possible pitch at the present time, can not keep up with the required demand. This year we shall have to spend better than \$6,000. Next year our engineer tells me we will need \$8,000 for that purpose.

UNEXPENDED BALANCE

Mr. WOODRUM. Will you have any unexpended balance out of your appropriation?

Doctor WETMORE. I would not anticipate more than two or three hundred dollars. There is shown in 1932 an unobligated balance of \$3,781. The greater part of that came from a special item of \$25,000 included last year for the construction of a gallery for our mammal collection. Due to the existing economic situation, in the purchase of materials and labor we were able to save around \$3,400 on the estimate of \$25,000 in connection with that item, which makes up the greater part of this unexpended balance of \$3,781. No such item is included in this present year.

REPAIRS TO NATURAL HISTORY BUILDING

Mr. WASON. May I ask you a question in reference to your natural history building. Are there some repairs needed there?

Doctor ABBOT. Mr. Chairman and Mr. Watson, you will recall that two years ago Congress authorized an addition to the natural history building by putting wings on either end to extend it from Ninth Street to Twelfth Street at an estimated cost of \$6,500,000.

Last year in the deficiency bill an item of \$10,000 was allowed for the preparation of the preliminary drawings. We have had those preliminary drawings made and Doctor Wetmore has them here and I do believe that the committee would be very much interested to see what is proposed. We wished very much that an item of \$1,200,000 could be included in the Budget this year for the beginning of the work on the extension as authorized, but this was not allowed in the Budget. I have asked Doctor Wetmore since whether a smaller amount might not work. He tells me that he has consulted the architect and that the foundations could be laid and the final drawings completed if a sum of \$700,000 could be available to start the work. Whether that might be possible under the present condition of the Treasury or not I do not know, but I would like at least to remind the committee of the status of the project and as a matter of record would like very much to show you the plans for the proposed additions to the natural history building.

Mr. WOODRUM. Just briefly give us an outline of it. We are very much behind time.

Doctor WETMORE. What we wish to do is merely to place on record our progress under the expenditure of the \$10,000 allotted last year for preliminary plans. After due consideration of various offers the board of regents allotted the contract for the preparation of preliminary plans to the Allied Architects (Inc.), of Washington, D. C., the same group that are carrying on the construction of the addition to the House Office Building. This was done with the understanding that the work would be performed under the immediate supervision of Mr. Nathan Wyeth, in whose ability we have great confidence. Mr. Wyeth and his associates have drawn up a scheme for the proposed new wings that is excellently conceived and that is demonstrated in the plans that I show here. We expect in the additions to this building to continue the same type of construction as we have at the present time, in which the two intermediate floors are given over to the public exhibitions and the upper floor and lower floor to offices, laboratories, and service in general. In the new exhibition halls we expect to eliminate all windows, since we find through long experience that daylight is one of the greatest enemies of public exhibition in our museums, bringing about deterioration through fading and through actual breakdown of many materials, so that they are destroyed. We expect in these new wings to eliminate daylight and use only controlled artificial light, the intensity of which can be directed as needed.

Doctor ABBOT. The committee understands from here to here [indicating on drawing] is the existing building.

Doctor WETMORE. I may say these preliminary plans have been submitted to the Fine Arts Commission and have their approval.

Mr. WOODRUM. We are very glad to have that statement in the record.

Doctor WETMORE. This plan shows the layout of the exhibition floors. This is the present building here [indicating]; here are the proposed wings [indicating on drawing]. We expect to introduce a new feature in having ramps between the two exhibition floors so that a visitor may walk up a gradual slope and at the same time obtain a view out over the adjacent halls. There will be elevator

service also available for those who desire it, an entrance on Twelfth Street and another one on Ninth Street. The general scheme of arrangement is that of a rectangle, which we find the most desirable for a building of this kind, as it allows free circulation of visitors through the building without congestion in any one part.

Doctor ABBOT. I understand, Doctor Wetmore, that the additions will about double the capacity?

Doctor WETMORE. Yes. I may say that now, in the space available, we are tremendously crowded and are having difficulty in housing our possessions. This is a view of the upper floor [indicating on drawing]. Here are two courts in the old building and here the new wings which we expect to add at either end.

Mr. HASTINGS. Does that second floor extend the entire length of the building?

Doctor WETMORE. Yes, sir.

Mr. HASTINGS. That second floor looks kind of short to me.

Doctor WETMORE. The wings will extend full four stories high, across the whole building.

Mr. BOYLAN. Are those courts necessary, or is that done in order to carry out the arrangement of the original building?

Doctor WETMORE. They are necessary to give light in the upper stories.

Mr. BOYLAN. As a matter of fact, you depend on artificial illumination for light to a great extent, do you not?

Doctor WETMORE. In the exhibition halls we do, but in the laboratories and workrooms we want as much natural light as we can get. The courts do not extend below the top story.

Mr. HASTINGS. What is the estimated cost of this extension, according to these plans you have just exhibited?

Doctor WETMORE. \$6,500,000.

Mr. WOODRUM. There is nothing estimated in this appropriation for it.

Mr. HASTINGS. He said he was trying to get \$700,000 but the Budget has not allowed it.

PRESERVATION, INCREASE, AND EXHIBITION OF COLLECTIONS

Mr. WOODRUM. The next item is for continuing preservation, exhibition, and increase of collections from the surveying and exploring expeditions of the Government, and from other sources, including personal services, traveling expenses, purchasing and supplying uniforms to guards and elevator conductors, postage stamps and foreign postal cards, and all other necessary expenses, and not exceeding \$5,500 for preparation of manuscripts, drawings, and illustrations for publications, and not exceeding \$3,000 for purchase of books, pamphlets, and periodicals, \$637,700.

Doctor WETMORE. This is the main appropriation for the maintenance of the National Museum and covers all expenses except those for heating, lighting, furniture, fixtures, and building repairs, which are appropriated for otherwise. It includes the main salary roll for the scientific and clerical staff and guards, as well as the labor and char force. Under it there is covered the work of identifying, classi-

fying, and exhibiting the National collections, the preparation of books and memoirs presenting the results of study of the collections, expenses in connection with new additions to the collections, and the cost of maintaining the extensive study collections and public exhibits at the Museum. It includes also expenditures for books for the Museum library and for foreign postage used in the transaction of Museum business.

The increase submitted is allocated as follows:

Personal services:

(1) Curator of fishes-----	\$4,600
(2) Assistant curator, vertebrate paleontology-----	3,200
(3) 2 senior stenographers at \$1,620-----	3,240
(4) 4 guards at \$1,200-----	4,800

Equipment:

(5) Laboratory equipment-----	2,000
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Total increase-----	17,840
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Deductions (budget saving)-----	590
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Net increase-----	17,250
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PERSONNEL AND SALARIES

Additions to personnel include the following:

(1) \$4,600 for the salary of a curator of fishes: The work of the division of fishes is of great economic, as well as scientific importance, because of its relation to the fishing industry. The Museum maintains a large collection of fishes from all over the world that is used constantly in investigations and studies of many kinds. The work of the division, at present under one assistant curator, is in arrears owing to increasing demands made upon it and the growth of the collections upon which its investigations are based. The additional position of a full curator recommended is required to properly handle the growing activities of this division.

(2) \$3,200 for the salary of an assistant curator of vertebrate paleontology: Additional assistance in the division of vertebrate paleontology is urgently needed at the present time in order to care for the growing collections and to take advantage of exceptional opportunities to obtain desirable specimens that offer and which must be utilized immediately or lost due to destruction by curio hunters, by the elements, or otherwise. The activities of this unit are specialized, calling for considerable training and experience, and include several months each year spent in field exploration. The work of the division is much in arrears in handling both study and exhibit material now on hand and the position indicated is urgently required.

(3) \$3,240 for the salaries of two senior stenographers: Additional services as stenographer and cataloguer are required in the department of anthropology and geology in order to handle the extensive additional work which has been forced on the scientific staff as a result of our rapidly increasing collections and the increasing demands made upon us for information and assistance. These appointments will make it possible for the research men in these departments to devote more time to strictly technical work which has

widespread interest and thus will expedite the activities of both departments. Their work has been increasing rapidly and clerical assistance in them is at a minimum.

(4) \$4,800 for the salaries of four guards: The additional guards recommended herewith are urgently needed in order to give better service to the numerous visitors to the National Museum and to furnish more adequate protection to our valuable collections. With the addition of the guards herewith recommended, it will be possible to take further steps in the direction of placing the watch force on a 6-day week, a plan which is now entirely impossible with our seriously undermanned force. The Museum must remain open to the public on Saturday and Sunday afternoons and on holidays; at the present time it is possible to compensate our guards with extra leave privileges for only a minor portion of such extra service.

NEW EQUIPMENT

(5) \$2,000 for new equipment: The amount recommended is required for the purchase of specimens and technical equipment of various kinds needed in the increasing scientific activities of the Museum. The Museum depends almost entirely on gifts for the building of the collections. It is not always possible to obtain important individual specimens in this way, and the small sum allotted for this purpose has made it impossible to take advantage of exceptional opportunities for adding unique accessions at small cost. Of the amount specified, \$1,000 will be allotted for the purchase of specimens and \$1,000 will be utilized for the purchase of needed technical equipment, such as microscopes, lenses, and miscellaneous laboratory equipment.

The present appropriation is taken up for the major part by the salary roll. With our growing collections and large numbers of visitors, it is impossible to make internal transfers which will provide available funds for miscellaneous use. A reduction of \$590 as a budget saving is made in conformity with the general plan of reducing expenditures by withholding commitments as much as possible. The saving indicated will be effected by delaying the initiation of new activities.

Doctor WETMORE. This is the principal appropriation covering the work of the National Museum. It carries the main salary roll and the various sums available for general expenditures. I wish to point out in this appropriation, the total appropriation for 1932 is \$620,510 while the total salary roll is \$594,751.

PERSONNEL AND SALARIES

Mr. WOODRUM. Is that the estimate you are going on or the actual salary roll?

Doctor WETMORE. This is the schedule roll. There is a difference between the total and the salary roll of only \$25,759 for expenditures outside of salaries. In other words, there is available approximately only 4.1 per cent of the total appropriation for general expenses. Now, that situation is one that makes it necessary for certain accumulations through lapses in salaries to allow operation. We have a large personnel engaged in varied lines of work. There is in-

cluded here what funds we have for miscellaneous materials, various expenses for cleaning supplies, comfort room necessities, and so forth. We find in actual operation that we require about \$35,000 annually in order to get by. Now, that additional sum of between \$9,000 and \$10,000 is obtained through those small lapses that come in turnovers in the salary roll. I wish to point this out to indicate the situation in which we shall find ourselves if we are required to impound all the income from lapses in salaries during the coming year.

There is now required annually about \$10,000 from the salary roll in order to get by. The situation is one that is quite difficult and one that is hard to handle. To indicate the situation for next year I may point out that in 1933 the estimate for the total appropriation is \$637,760, while the salary roll, including certain additions that have been allowed by the Budget in this estimate, is \$612,691. That gives a difference of \$25,069, or a little less than the difference indicated in the salary roll for 1932. I desire to say it is our endeavor to fill vacancies that occur as promptly as possible. We do not allow them to remain open longer than is necessary. In the case of guards and laborers a relatively small period elapses before the positions are filled as people are readily available for such employment. In the case of some of the scientific staff where replacement is required, it may take several months before we can find a proper person. Such employment requires those with special training and aptitude and also persons of the proper temperament.

Mr. WOODRUM. You are asking for eight additional personnel.

Doctor WETMORE. Yes, sir. The first one of these is for a curator of fishes. In the administration of the National Museum the work is divided into four major departments of anthropology, biology, geology, and arts and industries (history being included here), depending upon the field of work concerned. These departments are again subdivided into divisions, the work of which is given over to some specialized part of the field of the department.

In the division of fishes, one of the important divisions of the department of biology, we have at present employed one assistant curator in grade P-3 at a salary of \$3,500, and one aid, grade SP-6, who receives \$2,300. The work in this division is considerable. It has a very large and important collection of fishes preserved in alcohol and by other means, specimens that come from all over the world, and which are used constantly in investigations by the fish commission and other organizations interested in fish and the fishing industries. The value of a reference collection in this important commercial field is readily evident. Such a collection should have for its proper care a curator and assistant curator at least. At the present time we are only able to provide an assistant curator.

Mr. WOODRUM. Then this assistant curator of vertebrate paleontology?

Doctor WETMORE. That is for an assistant curator of vertebrate paleontology. I have shown here some fossil specimens we have obtained. The field is one that is very rich and one in which we are in the situation to obtain assistance from interested parties outside who will finance field investigations. It is specialized work. We have at the present time two persons engaged in that work. We

need a third one in order to take advantage of exceptional opportunities for work in the field, opportunities which must be taken without delay or cost. Additional assistance is required in that division.

Mr. WOODRUM. Then you need two additional stenographers?

Doctor WETMORE. Our clerical help throughout the institution is at a minimum. These two positions are indicated for two divisions in which there is no stenographic help of any kind available at the present time.

Mr. WOODRUM. Could you not get one good stenographer and handle them both under a pooling arrangement?

Doctor WETMORE. No, sir; a pool would not operate in our case. We use such employees for stenographic work and as cataloguers and for general clerical work in the various divisions. The work is specialized in each case and necessitates the acquirement of a special vocabulary on the part of the employee. I am asking for 2 clerks, 1 in geology and 1 in ethnology. The two types of work are entirely separate and different and the pool system will not operate under those circumstances. In the division of ethnology, for which I am asking one of these positions, I have two very competent men employed on the scientific staff, a curator and an assistant curator. At the present time I either have to give them temporary assistants from time to time for cataloging or for typing manuscripts, and so forth, such temporary assistance being quite unsatisfactory because on a three months' basis by the time a clerk gets competent it is necessary to let her go. When I can not supply such temporary help because of lack of funds these men find it necessary to do their own work. They are both good men. They are carrying on a tremendous amount of detail and are in a way being swamped. This additional assistance is badly needed.

The other stenographer is requested for the department of geology. In that entire department at the present time there is only one stenographer. There are four divisions in the department, each one with two or three men engaged in scientific investigations. That does not include the office of the head curator in which the one stenographer in the department is employed. The situation there is quite bad. I desire to say that we do not have clerks available in other parts of the organization that can be detailed for service here. If we had I would not be asking for an addition.

NEED FOR ADDITIONAL GUARDS



Mr. WOODRUM. You want four additional guards. What is the necessity for that?

Doctor WETMORE. The guard force is employed on a 24-hour basis. There are three watches during the day with men steadily engaged on each one. In other words, it is necessary to guard our buildings day and night. Our present guard force includes 82 men. We have 1 captain, 3 lieutenants, 4 sergeants, and 72 privates. These men by law have the same consideration in connection with the half holiday on Saturday as is given to other employees. Guard service is required on Sundays and other holidays as at any other time. We should be in a situation to allow one day off per week in lieu of

Sunday service but our force is too small to permit this. As a matter of fact, we find this last year that each guard has worked 306 days. In other words, he has been excused only 59 days for annual leave, Saturday afternoons off, and other holidays, including Sundays, whereas the average Government employee in the clerical branch, for example, is on duty for only 280 days. These men on the guard force therefore are required to work 26 days more each year than the average employee. We give them every possible consideration, but should have a larger number of them.

Some four years ago I made a survey of the situation as concerns our guard force to find that in order to give these men full time off in lieu of holiday service and to perform all necessary duties, we should need 24 additional men. The matter was brought to attention and certain additional guards have been added to the force. Two years ago we were given two; last year we were allowed to add eight more.

Last year the Saturday half holiday went into force and as required by law we excused these men on the half holiday. This absorbed the complete services of four of the new men, leaving us potentially with only four additional so that our situation at the present time is not much better than it was last year; although it is very fortunate we had the additional employees or we should not have known where to turn. I may say that the men complain about this existing situation. I do not blame them. The situation is not a logical one. They should have more excused time.

Mr. WOODRUM. What are their salaries?

Doctor WETMORE. They start at \$1,200. The older men, the men who have been longer on the rolls are getting up to \$1,380 with one who receives \$1,440. The sergeants start at \$1,500, the lieutenants at \$1,620, and the captain receives \$1,980. The salaries are quite low.

Mr. HASTINGS. And the ordinary guard receives \$1,200?

Doctor WETMORE. He receives \$1,200.

Mr. HASTINGS. That is the minimum pay?

Doctor WETMORE. Yes, sir. There is one additional increase in the estimate under this item of \$2,000 for equipment. That is something which is important to us. It is required for needed technical equipment, such as microscopes and various supplies of that kind, and some additional sums for the acquirement of specimens that are offered for purchase from time to time, and so forth.

NATIONAL GALLERY OF ART

Mr. WOODRUM. The next item is in reference to the National Gallery of Art, and is as follows:

For the administration of the National Gallery of Art by the Smithsonian Institution, including compensation of necessary employees, purchase of books of reference, and periodicals, traveling expenses, uniforms for guards, and necessary incidental expenses, \$45,220.

Doctor ABBOT. The above appropriation is to provide for the regular operations of the National Gallery of Art, which is administered under the direction of the Smithsonian Institution. No change is anticipated in these operations during the coming fiscal year, and no increase is asked in the appropriation.

Mr. WOODRUM. Your estimate is the same for the next fiscal year as for the past?

Doctor ABBOTT. Yes, sir.

Mr. WOODRUM. Will there be any unexpended balance in that appropriation this year?

Mr. DORSEY. I do not anticipate any; nothing more than last year.

SPECIAL AND MISCELLANEOUS SERVICES

Mr. WOODRUM. What is the special and miscellaneous service, \$1,000 as set up under that item?

Mr. DORSEY. Well, services of various kinds, not included in the regular routine.

Mr. WOODRUM. Temporary employees?

Mr. DORSEY. Temporary special services for work on cases and things of that kind; yes.

Mr. WOODRUM. How much of that have you used during the current year?

Mr. DORSEY. I have not that figure just at hand.

EQUIPMENT

Mr. WOODRUM. You seem to have for equipment the sum of \$1,075 for each year.

Mr. DORSEY. That is for cases, for screens, and things of that kind, in the galleries, and for books and other items of equipment.

Doctor WETMORE. For the replacement of burlap that becomes stained.

Mr. WOODRUM. How much of that did you use during the current fiscal year?

Mr. DORSEY. I have not that breakdown. I will put it in the record. (The amount expended to date is \$1,001.35.)

Doctor WETMORE. You might note, sir, that during 1931—

Mr. WOODRUM. I notice that was a large item in 1931. So you do not anticipate any saving out of this appropriation for the last fiscal year?

Mr. DORSEY. No. There was only \$164 saved in the last year's appropriation. We need all of that money in the regular operation of the gallery.

Mr. WOODRUM. You have here "Deducted savings and postponements," \$500. What does that mean?

Mr. DORSEY. That is simply a departmental reserve that the Budget asked us to put up at the beginning of the year as a possible saving. It is not a probable saving but it was put up at that time as a possible saving.

Mr. WOODRUM. You will not save it?

Mr. DORSEY. I do not think we will be able to save it; no, sir.

PRINTING AND BINDING

Mr. WOODRUM. The next item is printing and binding, reading as follows:

For all printing and binding for the Smithsonian Institution, including all of its bureaus, offices, institutions, and services located in Washington, District

of Columbia, and elsewhere, \$100,000, of which not to exceed \$12,000 shall be available for printing the report of the American Historical Association; *Provided*, That the expenditure of this sum shall not be restricted to a pro rata amount in any period of the fiscal year.

Doctor ABBOT. The above appropriation provides for the printing of all the Government branches under the Smithsonian Institution, and for the printing and binding of the annual report of the American Historical Association.

Mr. WOODRUM. I notice in connection with that item you are dropping \$4,000.

Doctor ABBOTT. That is on account of a difference due in publishing a volume of the annals of the Astrophysical Observatory for which appropriation was made last year, and that has been completed.

Doctor WETMORE. Mr. Chairman, I would like to make one statement here, if I may. In the last annual report of the Public Printer there was an indication of a very large quantity of Government publications that had been printed and held in stock for a time and then sold for waste paper. I wish to indicate that that condition has not been operating in our own case.

Our needs for funds for printing are considerable, and the money available is not sufficient at the present time. As illustrative, in the National Museum, which is one of the largest factors in this printing appropriation, we have unallotted at this date only a little more than \$6,000. In other words, we have about \$6,000 to run us until the end of the year, while we have accumulated valuable manuscripts that will cost about \$25,000 to print. We shall need to hold these over to the 1st of July, when further funds become available. There will be more added to them by then. There should be money available for handling them at that time, at least.

Doctor ABBOT. In other words, you are going steadily back?

Doctor WETMORE. We are getting behind. We are receiving manuscripts more rapidly than we can handle them.

Mr. WOODRUM. Will they all be of general public interest?

Doctor WETMORE. They are all of a nature that merits printing. Part of them need to be printed promptly. Those papers offered that are not useful and valuable we do not consider for publication. In all of our publications we hold the edition down to a minimum. In the case of the National Museum we are restricted to a total edition in any case of not to exceed 4,000 copies. In most instances we hold the edition below that. In average papers in our proceedings series, for example, which includes papers of great value to technical workers but are not of popular interest, the edition is varied according to the subject covered. In the case of papers dealing with birds we print 1,800 copies. One thousand six hundred of these go out on our mailing list, leaving a surplus of 200 for future distribution. In the case of insects the edition is 1,900. Our total mailing list for papers of this kind is 1,723, leaving a surplus of 177. The average surplus for our various papers after the initial distribution to the mailing list runs from 175 to 325 copies. That serves for distribution for from two to five years and then such papers are no longer available free. We feel that is sufficient, however, as complete sets are preserved in libraries throughout the country, and after that time anyone interested can turn to these for

the information desired. I know of no instance in which any quantity of our publications have been destroyed or have been sold as waste paper to reduce the bulk of the edition on hand.

Mr. Woodrum. That is a very interesting statement. You will have to have this \$100,000 for your printing needs, then?

Doctor Abbot. Yes, sir. Even so we are running behind.

Doctor Wetmore. I may amplify my previous statement a little. There are a few works that we publish that are of considerable popular interest, for instance, a series on the life history of North American birds in which we print the full edition of 4,000 copies. That series has been extremely popular. This allows distribution for about two to three years. We receive every year dozens and dozens of requests from Members of Congress whose constituents write in asking to have these works sent out to them. I wish we were in the situation to supply sets of the entire eight volumes that have been printed because of the many requests asking for them. At the present time the last two in the set are available only. The others are gone. The first volume in the series, Bulletin 107, published about 1920, has been quoted second hand in the last year at from \$20 to \$100 for a single copy, which will serve to show the demand in which these works are held.

Mr. Hastings. Does the Government get any revenue from the sale of any of these documents?

Doctor Wetmore. The edition printed for us is distributed gratis. Where a paper seems to have some general popular interest, the Superintendent of Documents has an edition printed, I believe, under a revolving fund under his control, which he sells at actual cost. That actual cost is a relatively small sum since our appropriation bears the entire expense of composition, so that extra copies are printed only for the price of the paper and presswork. There is no revenue derived from them so far as I am aware.

Mr. Hastings. Then there is no revenue that comes to the Smithsonian Institution from their sale?

Doctor Wetmore. No, sir.

Mr. Dorsey. The Superintendent of Documents has printed two editions of the Hand Book of the American Indian. They sold it for \$5 for the two volumes.

Needs of American Historical Association.

Mr. Woodrum. I wish you would provide the record with a statement from Mr. Jameson of the American Historical Association as to their needs and put it in the record.

Doctor Wetmore. We shall, sir.

Smithsonian Institution,
Washington, February 12, 1932.

Hon. C. A. Woodrum,
Chairman, Subcommittee on Independent
Offices Bill, House of Representatives,
Washington, D. C.

Dear Mr. Woodrum:

I am informed by Doctor Jameson that the amount of not exceeding \$12,000 for printing the report of the American Historical Association, which is contained in the Smithsonian estimates, is quite satisfactory to the association.

Very truly yours,
C. G. Abbot, Secretary.

Administration and maintenance of Gellatly Art Collection.

Mr. Woodrum. The next item is for administration, maintenance, and exhibition in New York City of Gellatly art collection, including rental, services, travel, and all other necessary incidental expenses, \$17,500.

Doctor Abbot. Mr. Chairman, the general appropriation has been \$20,000 a year,

covering the salary of the curator, the rent of the premises, light, cleaning, and other expenses, including incidentals. Is there any reduction on that, Mr. Dorsey?

Mr. Dorsey. No, sir. That will barely cover the cost. During the past year there was \$3,500 that was turned in. There will not be any saving, or practically any saving, for the current year. They are having a catalogue made of the ancient glass in the collection.

Mr. Woodrum. Briefly, what is the status of the litigation in connection with that collection?

Doctor Abbot. There is no litigation going on. The interests of the United States Government are in the hands of the Department of Justice, and so far as I know there is not at the present time any probability that any litigation will be instituted.

Mr. Woodrum. I thought a suit was brought by the widow to recover that collection?

Doctor Abbot. No; suit was not brought. I think she finds it is so hopeless it will not be brought. At least, there is no indication at the present time.



